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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,261	11/15/2001	Robert Conrad Malkemes	SAR 13956A	3727
55549	7590	10/04/2005	EXAMINER	
MOSER IP LAW GROUP / SARNOFF CORPORATION			ROBERTS, BRIAN S	
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SHREWSBURY, NJ 07702			2662	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/002,261	Applicant(s) MALKEMES ET AL.	
	Examiner Brian Roberts	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5, 6, 8, 13, 14, and 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7, 9-12 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/5/03; 8/14/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Claims 1,2,4,7,9-12, and 15-21 have been examined.
- Claims 3,5,6,8,13,14, and 22-24 have been withdrawn.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1,2,4,7,9-12, and 15-21 are drawn to a "Bridge or gateway between networks", classified in class 370, subclass 401.
- II. Claims 3,5,6,8,13, and 14 are drawn to a "transceiver", classified in class 455, subclass 73.
- III. Claims 22-24 are drawn to "remote control of distribution with subscriber selection or switching", classified in class 455, subclass 3.04.

Inventions of Group 1 and Group 2 are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the neighborhood gateway could be used to communicate with a plurality of transceivers that differ from the claimed transceiver such as a transceiver with only one antenna. The subcombination has separate utility such as the claimed receiver can be used to communicate with other transceivers instead of the gateway.

Inventions of Group 1 and Group 3 are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process could be used to configure a wireless wide area network that involves a server instead of a neighborhood gateway.

Inventions of Group 2 and of Group 3 are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be used to configure a wireless wide area network with a plurality of transceivers instead of the claimed transceiver such as a transceiver with only one antenna.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Ray Moser on 09/26/2005 a provisional election was made without traverse to prosecute the invention of group 1, claims 1,2,4,7,9-12, and 15-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3,5,6,8,13,14 and 22-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4, and 11-12 rejected under 35 U.S.C. 102(b) as being anticipated by Hylton et al. (US 5613191)

- In reference to claims 1

Hylton et al. teaches an apparatus for providing a wireless network that includes:

- A gateway for receiving a plurality of signals, selecting specific signals from the plurality of signals and transmitting the selected signals through an antenna (column 5 line 3 – column 6 line 35)
- A plurality of receivers for receiving the transmitted signals and for converting the transmitted signal into a format that is compatible with a network appliance (column 5 lines 32-40)

- In reference to claim 2

Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim. Hylton et al. further teaches an apparatus where the plurality of signals that includes one or more signal selected from a group comprising analog cable television, digital cable television, plain old telephone signals, digital subscriber line

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signal, satellite television signal, over-the-air television signals and any combination thereof. (column 5 lines 12-16)

- In reference to claim 4

Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim. Hylton et al. further teaches an apparatus wherein the gateway includes a transceiver for transmitting the selected signals and for receiving control signals from the network appliances. (column 6 lines 18-24)

- In reference to claim 11

Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim. Hylton et al. further teaches an apparatus wherein the gateway transmits 20 40 Mbits/sec in 6 MHz channels. (column 29 lines 19-25)

- In reference to claim 12

Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim. Hylton et al. further teaches an apparatus wherein the gateway is capable of transmitting approximately 50 channels. (column 12 lines 40-50)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. (US 5613191) in view of Schilling (US 6466610).

- In reference to claim 7

Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim.

Hylton et al. does not explicitly teach a spatial diversity combiner.

Schilling teaches a plurality of receiver antennas and space-diversity combiner. The space-diversity combiner combines a plurality of detected signals and the multiplicity of the detected-fading signals from each of the plurality of receiver subsystems, to generate a plurality of combined signals.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gateway and transceiver of Hylton et al. to include a spatial diversity combiner as taught by Schilling in order to minimize fading and enhance overall performance of a communications system and to maximize the receipt or capture of signals from a transmitter.

- In reference to claim 9

The combination of Hylton et al. and Schilling teaches an apparatus that covers substantially all limitations of the parent claim. Hylton et al. further teaches an apparatus

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that includes an appliance specific processor for processing the symbols to form an appliance compliant signal. (column 32 lines 33-47)

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. (US 5613191) in view of Meng (US 6697375).

- In reference to claim 10

Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim.

Hylton et al. does not explicitly teach that the gateway transmits signals in the 5.725 to 5.825 GHz band.

Meng teaches transmitting signals in the 5.725 to 5.825 GHz band. (column 1 lines 66 – column 2 lines 15)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gateway of Hylton et al. to transmit signals in the 5.725 to 5.825 GHz band as taught by Meng in order to utilize the newly allocated bands and provide for a faster maximum data rate.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. (US 5613191) in view of Felix et al. (US 5946356)

- In reference to claim 15

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Hylton et al. teaches an apparatus that covers substantially all limitations of the parent claim. Hylton et al. further teaches utilizing M-ary frequency shift keying in SFH-CDMA systems.

Hylton et al. does not explicitly teach that the M-ary signal is a 256-ary signal.

In Figure 4, Felix et al. teaches an apparatus transmitting data within a broadband communication system utilizing 256-ary signals.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gateway of Hylton et al. to transmit 256-ary signals as taught by Felix et al. in order to provide a high data rate communication system.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 4, 7, 9-12 and 15-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims

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1,2,6,7,8,9,10,11,12 and 13-18 of U.S. Patent No. 6647015. Although the conflicting claims are not identical, they are not patentably distinct from each other.

- In reference to claims 1

Claim 1 of the instant application recite does not recite a gateway firewall, whereas claim 1 of the USP 6,647,015 recites a gateway firewall for providing a firewall and for encryption of transmitted signals and a receiver.

Even though claim 1 of the current application are broadened by omitting the limitation of a gateway firewall for providing a firewall and for encryption of transmitted signals and a receiver in claim 1 of USP 6,229,824, it has been held that the omission on an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karison, 136 USPQ 184(CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be an obvious variation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the methods and apparatus of the current application using a gateway firewall for providing a firewall and for encryption of transmitted signals and a receiver, as shown in USP 6647015, since the methods and apparatus function the same regardless of the firewall gateway.

- In reference to claims 2, 4, 7, 9-12, and 15

Claims 2, 4, 7, 9-12, and 15 are substantially the same as claims 2 and 6-12 of USP 6,647,015.

- In reference to claim 16

Claim 16 of the instant application recite does not recite a gateway firewall, whereas claim 13 of the USP 6,647,015 recites a gateway firewall coupled to at least one decoder for providing a firewall and for encryption of transmitted signals and a receiver.

Even though claim 16 of the current application are broadened by omitting the limitation of a gateway firewall coupled to at least one decoder for providing a firewall and for encryption of transmitted signals and a receiver in claim 13 of USP 6,229,824, it has been held that the omission on an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karison, 136 USPQ 184(CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be an obvious variation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the methods and apparatus of the current application using a gateway firewall coupled to at least one decoder for providing a firewall and for encryption of transmitted signals and a receiver, as shown in USP 6,647,015, since the methods and apparatus function the same regardless of the firewall gateway.

- In reference to claims 17-21

Claims 17-21 are substantially the same as claims 14-18 of USP 6,647,015.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are:

- Gersberg et al. (US 6546016) teaches a coaxial cable/twisted pair cable telecommunications network architecture.
- Olds (US 6757263) teaches wireless system with subscriber units.
- Hylton et al. (US 5613191) teaches a customer premise wireless distribution of audio-video, control signals and voice using CDMA.
- Ivie et al. (US 5815086) teaches an automated appliance control system.
- Houggy et al. (US 5838226) teaches communication protocol for transmission system for controlling and determining the status of electrical devices from remote locations
- Kiyanagi et al. (US 6029056) teaches a space diversity receiving apparatus.
- Calderbank et al. (US 6115427) teaches a method and apparatus for data transmission using multiple transmit antennas.
- Sharood et al. (US 2001/0025349) teaches a retrofit monitoring device.
- Elwahab et al. (US 2001/0034754) teaches a system for providing web browser access and control of devices on customer premise gateways.
- Somashekar et al. (US 2002/0116477) teaches a technique for configuring network deliverable components.

- Gerszberg et al. (US 6452923) teaches a cable connected to WAN interconnectivity services for corporate telecommuters.
- Dynarski et al. (US 6272129) teaches a method of dynamic allocation of wireless mobile nodes over an Internet protocol network.
- Davis et al. (US 5896382) teaches a method and apparatus for communicating information between a headend and subscriber over a wide area network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Roberts whose telephone number is (571) 272-3095. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

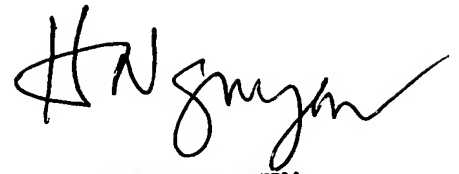
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09/28/2005

A handwritten signature in black ink, appearing to read 'Hanh Nguyen', with a stylized flourish at the end.

**HANH NGUYEN
PRIMARY EXAMINER**